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**ACOUSTIC SAMPLE INTRODUCTION**  
**FOR ANALYSIS AND/OR PROCESSING**

**ABSTRACT OF THE DISCLOSURE**

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The invention relates to the efficient transport of a small volume of fluid, such as may be required by mass spectrometers and other devices configured to process and/or analyze small samples of biomolecular fluids. Such transport involves nozzleless acoustic ejection. In some instances, sample molecules contained in droplets of fluid are introduced from a reservoir into an ionization chamber of an analytical device. In other instances, sample molecules are introduced into a small capillary by directing focused acoustic radiation at a focal point near the surface of a fluid sample. In still other instances, acoustic ejection is used to form an array on a surface, wherein the features of the array are ionized for analysis. The invention may be used with microfluidic devices. Thus, the invention facilitates the processing and/or analysis of various types of samples, such as biomolecules having high molecular weights.

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